

Remarks

The Examiner has objected to informalities in Claims 9-11. Claims 9-11 have been amended to overcome these informalities.

The Examiner has rejected Claims 1, 3-11 as being anticipated by US Patent No. 5,064,426 to Cope et al., and Claims 1, 3-5, 7-11 as being anticipated by US Patent No. 5,891,153 to Peterson and by US Patent No. 6,174,318 to Bates et al. Claim 6 is rejected as being unpatentable over Peterson or Bates et al in view of Cope et al. Applicant respectfully disagrees with the Examiner's rejections based on the following argument.

Claim 1 discloses a medical instrument for creating a cavity for an endoscopic intervention in a human or animal body, comprised of a hollow cylindrical encasing trocar tube which can be inserted into an artificial body opening and an expander which can be extracted from and retracted into said trocar tube. The trocar tube consists of two coaxial sleeves arranged at a distance to one another. The expander comprises of a retaining element arranged outside the trocar tube and at least two spring blades. The spring blades extend through the tube of the trocar through the gap formed between said coaxial sleeves and are fixed to the retaining element.

The Cope reference discloses a medical stone retrieval basket 100 comprising three loops 101-103 of wires 104-106 attached to distal end 113 of inner elongated member tube 114 for capturing and crushing relatively large-sized calculi found typically in the biliary and urinary systems. (col. 3, ll. 45-50).

The Cope reference discloses wires 101-103 attach to the distal end of the inner coaxial sleeve or inner elongated member tube 114. Thus, the blade or wires of the Cope basket do not extend through the tube of the trocar through the gap formed be-

tween coaxial sleeves as required by Claim 1. Because of the manner and position that the Cope wires are retained, the wires do not pass between inner elongated member tube 114 and outer elongated member tube 200 of the Cope instrument. Applicant respectfully submits that the Cope instrument is structurally different and does not operate like the present invention.

Further, there is no disclosure, teaching or suggestion in the Cope reference to alter the Cope instrument to include spring blades extending through the tube of the trocar through a gap formed between coaxial sleeves and are fixed to a retaining element arranged outside the trocar tube. In fact, such an instrument would not work as disclosed in the Cope reference. This superelastic property of the wire permits the repeated capture and pick up of all the stones and stone fragments within the organ cavity. (col. 5, ll. 33-35). Because of the superelastic property of the wire of the Cope expander, the wires must be retained proximate to the basket to allow it to capture stones without the wires displacing and opening the basket. Applicant respectfully submits that the rejection over Cope is overcome.

The Peterson reference discloses a surgical instrument for removing the cataractous nucleus from the eye having five wires 9-11 which make up an expandable basket 33. (col. 7, ll. 10-11). Wires 9 and 10 pass through a distal fixed partition 17 and are fastened to the inferior portion of the retractable guide 13. (col. 7, ll. 15-17). The two peripheral wires 11 follow a similar course to the retractable guide 13 except they pass through the retractable guide 13 and possess capped or enlarged ends 18 on the proximal side of the retractable guide 13. (col. 7, ll. 19-23). The retractable guide 13 is located within tubular member 4 of the Peterson instrument. (see figures).

The Peterson reference does not disclose a retaining element arranged outside the trocar tube. At all times of operation, the retractable guide 13 is contained within tubular member 4.

Further, the Peterson expander does not extend through the tube of the trocar through a gap formed between coaxial sleeves because Peterson does not disclose coaxial sleeves. Peterson has only tubular member 4 and does not disclose an inner coaxial sleeve, and thus provides no gap formed between coaxial sleeves as required by Claim 1.

Finally, there is no disclosure, teaching or suggestion in the Peterson reference to alter the Peterson instrument to include an inner coaxial sleeve such that the blades or wires can extend through a gap formed between an inner coaxial sleeve and tubular member 4. In fact, such an instrument would not operate as disclosed in the reference. An inner coaxial sleeve would interfere with, at least, the interaction of the wires 9-11 and the retractable guide 13 and fixed partition 17. Applicant respectfully submits that the rejection over Peterson is overcome.

The Bates reference discloses a medical retrieval device including a basket 10 with a plurality of legs 28, (30, 32, 34) used to retrieve material from a body such as stones. (col. 4, ll. 10-18). The proximal end 6 of each leg extends at least to a distal end 20 of the sheath 14. (col. 4, ll. 20-23). One or more basket legs attach to the distal end 24 of elongated member 22. (col. 4, ll. 53-55). In some embodiments one or more legs are also attached to elongated member 23. (col. 5, ll. 12-18). The elongated members are enclosed within the lumen of the sheath. (col. 5, ll. 29-31). In one embodiment, each basket leg 28 runs individually down the entire length of the sheath 14. (col. 4, ll. 30-33).

The Bates reference does not disclose a retaining element arranged outside the trocar tube to which at least two blades are fixed. In the cases where the legs attach to elongated members 22 and 23, any retaining member used to attach the legs to the elongated members is necessarily within the lumen of the sheath as the elongated members are enclosed within the lumen. Thus not outside the trocar tube as required

by Claim 1. Where each basket leg 28 runs individually down the entire length of the sheath 14, the Bates instrument also does not meet the requirement of Claim 1 that a retaining element be arranged outside the trocar tube to which at least two blades are fixed. The individual wires of Bates would attach to a handle 44. Bates explicitly teaches that by keeping each leg 28 independent as it extends from the basket tip 16 to the actuating handle 12, several modes of operation can be achieved. (col. 4, ll. 33-37). Thus, by instructing that the legs be independently operable, Bates teaches away from having at least two blades fixed to the retaining member.


Further, neither the Bates basket legs, nor do the elongated members extend through the tube of the trocar through the gap formed between coaxial sleeves as required by Claim 1. While Bates discloses a lumen within the sheath 14, it provides no gap between any coaxial sleeve for the wires or the elongated members to pass between. Thus Bates is structurally different than the requirements of the Claim 1.

Finally, there is no disclosure, teaching or suggestion in the Bates reference to alter the Bates instrument to include an inner coaxial sleeve such that the blades or wires can extend through a gap formed between an inner coaxial sleeve and tubular member 4. Further, Bates teaches away from such an arrangement by disclosing different arrangements and weavings of the legs to provide for different modes of operation and increased maneuverability of the basket. Combining Bates with an inner sleeve would make many of the disclosed modes inoperable. Applicant respectfully submits that the rejection over Bates is overcome.

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Response to Official Action

Accordingly, Applicant respectfully submits that all Claims, Claims 1 and 3-11 are in condition for allowance.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Wesley W. Whitmyer, Jr.", written over a horizontal line.

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